



# **Corrective Action Framework Meeting Honeywell Frankford Plant**

PAD002312791 – Philadelphia  
February 12, 2015

# Agenda

**Honeywell**

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- **Introductions**
- **Statement of Meeting Objectives**
- **Brief Review of Previous Meeting**
- **Corrective Action Objectives by Media**
- **Objectives for Investigation Workplan**
- **Current Site Conceptual Model**
- **Data Gaps and Proposed Sampling Locations**
- **Summary and Discussion**

# Meeting Objectives

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- **Agree on remaining site work to complete Facility Investigation and support a Final Remedy**
- **Agree on Constituents of Concern**
- **Discuss a schedule for Facility Investigation**

# Review of July 2014 Meeting

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- **Applied Regional Screening Levels to all compounds to determine COCs**

100% Screening  
Get.  
List of Chemicals

- **Identified data gaps in six areas to be further investigated**
- **EPA also requested further investigation into deep groundwater flow and contamination**
- **Reviewed potential receptors and exposure routes**
- **Reviewed potential corrective measures to eliminate exposure routes**



# **Corrective Action Objectives by Media**

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## **Surface Soil**

- **Control or eliminate direct exposure pathways from surface soil to potential receptors onsite and offsite**

## **LNAPL Plume**

- **Prevent LNAPL migration offsite**
- **Reduce the mass of LNAPL to maximum extent practicable**

# Corrective Action Objectives by Media

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## Groundwater

- Restrict offsite migration of impacted groundwater
- Maintain plume stability
- Monitor annually for further reductions in COCs
- Eliminate complete risk pathways



## Vapor Intrusion

- Eliminate possibility of complete VI exposure pathways

Andy → OSCFA  
Stimulus

value in subseq.  
sampling.

# Objectives for Investigation Work Plan

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<b>Constituents of Concern</b>	identified during previous meeting
<b>Groundwater</b>	delineation considering MCLs and complete exposure pathways
<b>Surface Soil</b>	characterize top two feet of soil in anticipation of deed restriction
<b>Offsite Soil</b>	offsite soil impact under Lefevre Street, where naphthalene-like material requires visual delineation
<b>Onsite VI</b>	evaluated in 2014 and mitigation efforts underway by Plant
<b>Offsite VI</b>	evaluated in 2014, will be reevaluated after final investigation to address data gaps

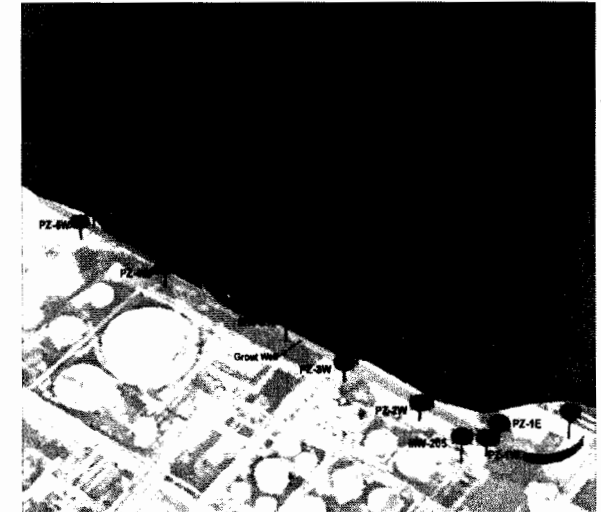
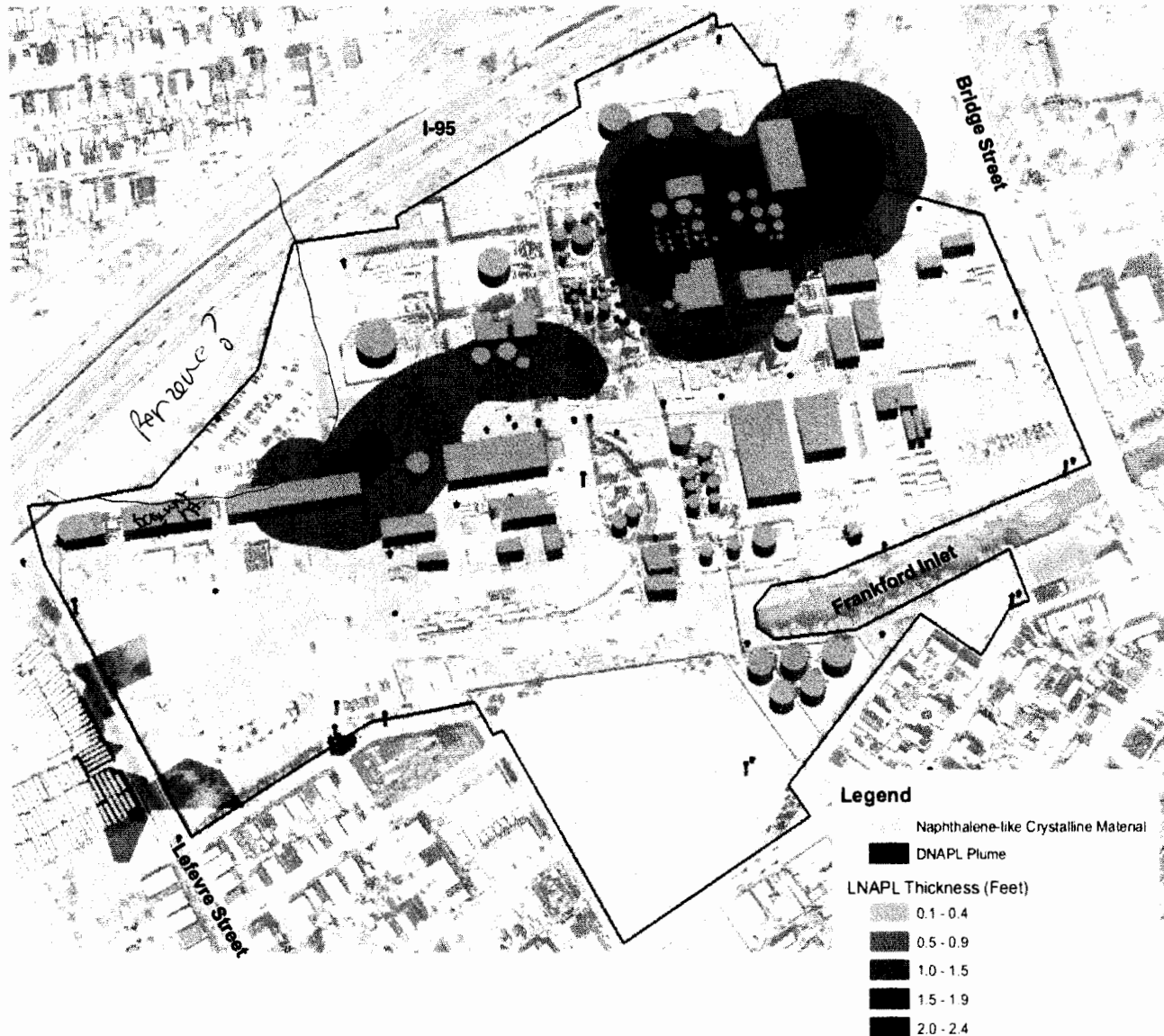
*bucket sampling*

# 2013 Conceptual Site Model

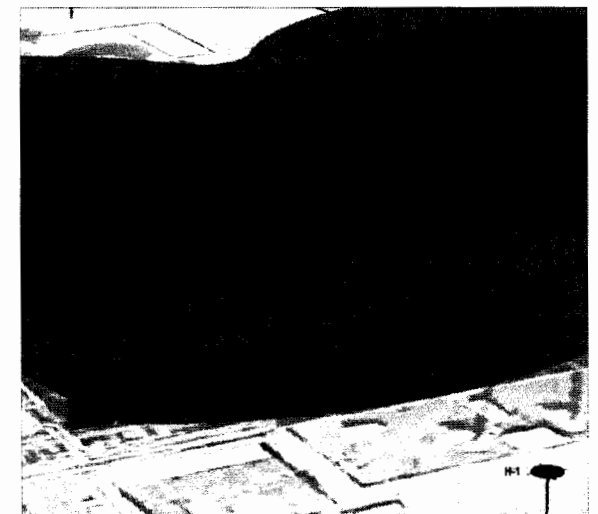
Honeywell

*need  
review.*

*Generate  
a  
list for  
addition  
info*



*Good well*



*collection tank*



Look @ charter school for info. From Eric overall.

Red shown

# Data Gaps & Proposed Sampling Locations

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COC's + LNAPL relationship

- LNAPL identified at property line (TWP-09; 2013 investigation)
- No delineation beyond TWP-09 (offsite)
- Propose three TWPs to determine extent of LNAPL
- Propose one MW to delineate and monitor plume
- Remedy may include further recovery efforts

## LNAPL Migration to the Northeast

Citizen group advisory

# Data Gaps & Proposed Sampling Locations

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- MW-106: intermittent MCL exceedances
- MW-105: no MCL exceedances
- Arsenal report suggests plume migration between MW-105 and MW-106
- Propose one MW to close gap between MW-105 and MW-106
- Remedy may include LNAPL recovery and natural attenuation of dissolved-phase COCs

**Eastern Boundary along Bridge Street**

# Data Gaps & Proposed Sampling Locations

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*Wash* *Alto* *Naphthalene*  
*17 steps out*



- Material encountered at various depths on the western boundary
- Material extends offsite into Lefevre Street and adjacent properties
- Evidence of localized groundwater impact
- Propose four soil borings to complete delineation
- Remedy may include deed restrictions of affected properties

*Gray is a source for Naphthalene*

## Naphthalene-like Crystalline Material

# Data Gaps & Proposed Sampling Locations

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*no longer  
flow*

*now does  
no water  
flow*



- MW-110: fluctuations in BTEX and cumene
- MW-118: historical fluctuations; 2014 data show COCs < MCLs
- Source is undetermined
- Propose three MW to delineate COCs
- Re-evaluate potential for VI in Admin and Laboratory buildings
- If site-related, remedy may include groundwater recovery

## Northwest Benzene Area

# Data Gaps & Proposed Sampling Locations

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- No soil lab data for the 0–2 feet range
- Propose collection of soil samples at approximately 25 locations, to be analyzed for VOC and SVOC
- Remedies may include hot-spot excavation and/or engineering controls to prevent direct contact, as well as deed restriction of entire plant

## Site-wide Shallow Soil



# Data Gaps & Proposed Sampling Locations

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- Currently ten deep wells screened above bedrock
- DNAPL encountered in MW-302 only and delineated by four surrounding deep wells
- Residual product delineated by TarGOST in 2012
- Reviewed regional bedrock groundwater flow; no further investigation proposed
- Remedy may include DNAPL recovery from MW-302 → include in RCRA program

## Deep Groundwater and DNAPL

AA  
BB  
CC

check

check filled after MWIT  
call - for MWIT

# Open Discussion

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- **Document Submittals**

- Site map with all wells - submitted
- Cross sections with sewers – submitted
- GIS Data - submitted
- New QAPP to be submitted with Investigation Work Plan –
- Future Submittals to be electronic

- **Timeline**

- Verbal agreement of work scope
- Submittal of final Work Plan within 60 days of work scope agreement
- Initiate field work within 30 days of written EPA approval of Work Plan and following receipt of offsite property access agreements

# Open Discussion *(continued)*

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- **Communication**
  - EPA attendance at sampling events
  - Routine progress calls



# **Open Discussion & Questions**

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